United States Patent [19]

Larm et al.

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[54] **PROCESS FOR THE PREPARATION OF SURFACE MODIFIED SOLID SUBSTRATES**

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[52] **U.S. Cl.** **427/2**; 428/409; 428/410; 428/426; 428/457; 428/421; 428/423.1; 428/447; 428/500; 514/56; 514/59

[58] **Field of Search** 428/409, 410, 421, 423.1, 428/426, 457, 447, 500; 427/2; 514/56, 59

[56] **References Cited**

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[57] **ABSTRACT**

Method for surface modifying substrates characterized in absorbing on the surface of a solid substrate a polyamine of a high average molecular weight and cross-linking this with crotonaldehyde either simultaneously or by addition in separate steps to produce amino groups on the surface of the substrate, and optionally adsorbing one or several alternating layers of an anionic polysaccharide and of the said polyamine being cross-linked with crotonaldehyde, and optionally finally adsorbing the said polyamine, not cross-linked, to produce free primary amino groups by which chemical entities having a biological activity may be bound by covalent or ionic bonding.

14 Claims, No Drawings